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09/774,964	01/31/2001	Stanley L. Moyer	1300-US	6014

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ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1.   Application Number 09/774, 964 was filed on 01/31/2001.   Claims 1-16 are

subject to examination.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as
> set forth in section 102 of this title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a whole would have been obvious
> at the time the invention was made to a person having ordinary skill in the art to which said
> subject matter pertains. Patentability shall not be negatived by the manner in which the invention
> was made.

3.   Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wengrovitz (US 2002/0110113) in view of Moore JR. et al. (hereinafter Moore)(US

2002/0021465 A1) and further in view of Fox et al. (hereinafter Fox)(US 6, 421, 781).

Referring to claim 1,

The reference Wengrovitz teaches in FIG. 1A which is a functional block diagram for

establishing a SIP call via a proxy SIP server 10.   The proxy server 10 receives an

invitation from a calling device, referred to as a user agent client (UAC) 15, in the form

of an INVITE request. The INVITE request includes the SIP URL of a user agent server

(UAS) 20 that contacts the callee when a SIP request is received, and returns a

response on behalf of the callee. (page 1, para. [0006]). The reference fails to teach the

UAS processor as being connected to the appliance. The reference Moore teaches the

home networking gateway (HNG or CG of Fig.1, element 10) providing an interface

between an HFC network and an in-home network. Full voice and data connection

between the HFC network and each device in the in-home network is provided through the interface. A translator included in the home networking gateway is utilized to provide a mapping between the communication protocols used in the in-home network and the protocols used in the HFC network, eliminating the need for the in-home network to be dependent upon the HFC-specific protocols. (Abstract). Thereby, the reference teaches that the HFC-specific protocols are immaterial to CG (HNG) and can be replaced to handle SIP. The reference also teaches a home networking gateway (HNG) is used as an interface between an HFC network and the home devices and includes the capability of "discovering" the various devices attached to the in-home network. (appliance status information).(page 1, para.[0010]). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS by including the functionality of Moore's CG (HNG) such that the UAS with combined functionality will provide compatibility between the SIP and a variety of in-home networking protocols since the CG (HNG) has a translator function providing compatibility as taught by Moore. Although, the reference Wengrovitz teaches a presence of SIP proxy server facilitating communication between UAC and UAS as stated above, both of these references explicitly fail to teach the proxy server having mapping capability to direct at least some of the messages through the appropriate UAS processor to the appliance to which they are addressed. The reference Fox teaches Proxy server (push server) device 114, also referred to as proxy server or gateway server, may be a workstation or a personal computer and performs mapping or translation functions. For example, the proxy server may map from one

network protocol to another network protocol.(Fig.2, element 114, col.3, lines 65-67 and col. 4, lines 1-5, col.6, lines 23-25). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS by including the functionality of Moore's CG (HNG) such that the UAS with combined functionality will provide compatibility between the SIP and a variety of in-home networking protocols since the CG (HNG) has a translator function providing compatibility as taught by Moore, and enhancing Wengrovitz's SIP proxy server by Fox's proxy server's mapping capabilities such that it can direct at least some of the messages through the appropriate UAS processor to the appliance to which they are addressed. Thus, the push server authenticates the request from the information service provider by verifying the certificate. The push server also determines if the certificate was issued from an acceptable certificate authority by examining an acceptable certificate authority list. Finally, the push server checks the content of the notification to be sure it does not interfere with other information service providers. After performing the security checks, the push server processes the notification request. Thus, clearly indicated by the references stated above with their applied motivations, a SIP system session initiation protocol (SIP) system for communications between a client and at least one networked appliance (to be replaced by callee of Wengrovitz), comprising:a user agent server (UAS) processor (Moore's HNG) connected to said appliance so as to relay commands to said appliance and receive status information from said appliance; a user agent client (UAC) processor having the capacity to send SIP command messages intended for said appliance to said UAS processor (Moore's

HNG) over a communications network and to receive over the communications network

status information messages about said appliance from said UAS processor, said UAS

processor translating received SIP commands into commands recognized by the

appliance and translating information provided by said appliance into SIP status

messages for transmission over the communications network to said UAC processor;

and a network appliance system proxy server (Proxy) (Fox's proxy) located between

the UAC and the UAS for receiving and conveying information between them; and

wherein the UAS processor does use address mapping capability for handling at least

some of the messages to and from the appliances; and wherein Proxy has address

mapping capability to direct said at least some messages through the appropriate UAS

processor to the appliance to which they are addressed, is designed once the proxy

server can map from one network protocol to another network protocol and HNG which

has a translator included in the home networking gateway is utilized to provide a

mapping between the communication protocols used in the in-home network and the

protocols used in the HFC network, eliminating the need for the in-home network to be

dependent upon the HFC-specific protocols.

Referring to claims 2, 6 and 7,

The reference Wengrovitz teaches in FIG. 1A which is a functional block diagram for

establishing a SIP call via a proxy SIP server 10. The proxy server 10 receives an

invitation from a calling device, referred to as a user agent client (UAC) 15, in the form

of an INVITE request. The INVITE request includes the SIP URL of a user agent server

(UAS) 20 that contacts the callee when a SIP request is received, and returns a

response on behalf of the callee. (page 1, para. [0006]). The reference fails to teach the UAS processor as being connected to the appliance. The reference Moore teaches the home networking gateway (HNG or CG of Fig.1, element 10) providing an interface between an HFC network and an in-home network. Full voice and data connection between the HFC network and each device in the in-home network is provided through the interface. A translator included in the home networking gateway is utilized to provide a mapping between the communication protocols used in the in-home network and the protocols used in the HFC network, eliminating the need for the in-home network to be dependent upon the HFC-specific protocols. (Abstract). Thereby, the reference teaches that the HFC-specific protocols are immaterial to CG (HNG) and can be replaced to handle SIP. The reference also teaches a home networking gateway (HNG) is used as an interface between an HFC network and the home devices and includes the capability of "discovering" the various devices attached to the in-home network. (appliance status information).(page 1, para.[0010]). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS by including the functionality of Moore's CG (HNG) such that the UAS with combined functionality will provide compatibility between the SIP and a variety of in-home networking protocols since the CG (HNG) has a translator function providing compatibility as taught by Moore. Although, the reference Wengrovitz teaches a presence of SIP proxy server facilitating communication between UAC and UAS as stated above, both of these references explicitly fail to teach the proxy server. The reference Fox teaches Proxy server (push server) device 114, also referred

to as proxy server or gateway server, may be a workstation or a personal computer and performs mapping or translation functions. For example, the proxy server may map from one network protocol to another network protocol.(Fig.2, element 114, col.3, lines 65-67 and col. 4, lines 1-5, col.6, lines 23-25). The push server authenticates the request from the information service provider by verifying the certificate. The push server also determines if the certificate was issued from an acceptable certificate authority by examining an acceptable certificate authority list. Finally, the push server checks the content of the notification to be sure it does not interfere with other information service providers. After performing the security checks, the push server processes the notification request. (Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS by including the functionality of Moore's CG (HNG) as stated above, and enhancing Wengrovitz's SIP proxy server by Fox's proxy server's authentication, authorization and translation capabilities such that it can direct the messages to the appliances for which the clients are authorized , authenticated and in the form that appliance can interpret. Thus, the push server (proxy server) authenticates, authorizes and translates the requests by verifying the certificate. The push server also determines if the certificate was issued from an acceptable certificate authority by examining an acceptable certificate authority list. Finally, the push server checks the content of the notification to be sure it does not interfere with other information service providers. After performing the security checks, the push server processes the notification request.

Referring to claims 3, 4 and 5,

Keeping in mind the teachings of the references as indicated in claim 1, the reference Wengrovitz fails to teach authentication, authorization and translation capabilities of UAS. The reference Moore teaches in performing service management, HNG 30 controls access to MSO-based services. HNG 30 can obtain from NMS/EMS authorization and authentication information to subscribers to access services or, alternatively, by consulting its service level agreement (SLA) database 64 to see if the service is listed for the home. In this embodiment, SLA database 64 contains the services authorized in the home services by HNG 30 as well as the class of service (e.g., premium, standard or basic) with which the subscriber has signed. (page 3, [0037]). The reference Moore also teaches a translator included in the home networking gateway is utilized to provide a mapping between the communication protocols used in the in-home network and the protocols used in the HFC network, eliminating the need for the in-home network to be dependent upon the HFC-specific protocols. (Abstract). Thereby the reference teaches that the HNG of Moore (UAS processor) has the capability to use, if required, and not to use, if not required, message authentication , message authorization, and message translation functions. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS processor by including the functionality of Moore's CG (HNG) such that the UAS with combined functionality will provide compatibility between the SIP and a variety of in-home networking protocols since the CG (HNG) has message authentication, message authorization, and message

translation functions as taught by Moore wherein the UAS processor do not use do not

use at least some message authentication capabilities, message authorization

capabilities and message translation capabilities. Thus, providing these capabilities to

HNG, SLA can be checked to determine the QoS guaranteed for each service as taught

by Moore. Although, the reference Wengrovitz teaches a presence of SIP proxy server

facilitating communication between UAC and UAS as stated above, both of these

references explicitly fail to teach the proxy server having authentication capabilities for

the appliances connected by the UAS servers to the Proxy, said authentication

capabilities acting to assure that the message directed to an appliance is from an

authentic client, authorization capabilities for the appliances connected by the UAS

servers to the Proxy, said authorization capabilities acting to assure that a command in

the message directed to an appliance is within the client's authority and, the Proxy has

translation capabilities for the appliances connected by the UAS servers to the Proxy,

said translation capabilities acting to assure that a command in the message directed to

an appliance is in a form that the appliance can interpret. The reference Fox teaches

Proxy server (push server) device 114, also referred to as proxy server or gateway

server, may be a workstation or a personal computer and performs mapping or

translation functions.   For example, the proxy server may map from one network

protocol to another network protocol.(Fig.2, element 114, col.3, lines 65-67 and col. 4,

lines 1-5, col.6, lines 23-25). The push server authenticates the request from the

information service provider by verifying the certificate.   The push server also

determines if the certificate was issued from an acceptable certificate authority by

examining an acceptable certificate authority list. Finally, the push server checks the
content of the notification to be sure it does not interfere with other information service
providers. After performing the security checks, the push server processes the
notification request. (Abstract). Therefore, it would have been obvious to one having
ordinary skill in the art at the time of invention was made to modify and enhance
Wengrovitz's UAS by including the functionality of Moore's CG (HNG) as stated above,
and enhancing Wengrovitz's SIP proxy server by Fox's proxy server's authentication,
authorization and translation capabilities such that it can direct the messages to the
appliances for which the clients are authorized , authenticated and in the form that
appliance can interpret. Thus, the push server (proxy server) authenticates, authorizes
and translates the requests by verifying the certificate. The push server also
determines if the certificate was issued from an acceptable certificate authority by
examining an acceptable certificate authority list. Finally, the push server checks the
content of the notification to be sure it does not interfere with other information service
providers. After performing the security checks, the push server processes the
notification request.

Referring to claims 8, 9 and 10,

Keeping in mind the teaching of the reference Wengrovitz as stated above, the
reference fails to teach the UAS processor as being connected to the appliance. The
reference Moore teaches the home networking gateway (HNG or CG of Fig.1, element
10) providing an interface between an HFC network and an in-home network. Full voice
and data connection between the HFC network and each device in the in-home network

is provided through the interface. A translator included in the home networking gateway is utilized to provide a mapping between the communication protocols used in the in-home network and the protocols used in the HFC network, eliminating the need for the in-home network to be dependent upon the HFC-specific protocols. (Abstract). Thereby, the reference teaches that the HFC-specific protocols are immaterial to CG (HNG) and can be replaced to handle SIP. The reference also teaches a home networking gateway (HNG) is used as an interface between an HFC network and the home devices and includes the capability of "discovering" the various devices attached to the in-home network. (appliance status information).(page 1, para.[0010]). The reference also teaches the home network (Fig.3, element 15) containing "Dongle" (Fig.3, element 58) (appliance controller), which is located between HNG (USA processor) and the appliance, which converts digital signals to analog signals to the device.(appliance) (page 2,[0028]). The reference also teaches the plurality of appliances in one geographic location that are networked to a single HNG (UAS processor).(Fig. 3, elements 15 and 58). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS by including the functionality of Moore's CG (HNG) such that the UAS with combined functionality will provide compatibility between the SIP and a variety of in-home networking protocols since the CG (HNG) has a translator function providing compatibility as taught by Moore. Although, the reference Wengrovitz teaches a presence of SIP proxy server facilitating communication between UAC and UAS as stated above, both of these references explicitly fail to teach the proxy server. The

reference Fox teaches Proxy server (push server) device 114, also referred to as proxy server or gateway server, may be a workstation or a personal computer and performs mapping or translation functions. For example, the proxy server may map from one network protocol to another network protocol.(Fig.2, element 114, col.3, lines 65-67 and col. 4, lines 1-5, col.6, lines 23-25). The push server authenticates the request from the information service provider by verifying the certificate. The push server also determines if the certificate was issued from an acceptable certificate authority by examining an acceptable certificate authority list. Finally, the push server checks the content of the notification to be sure it does not interfere with other information service providers. After performing the security checks, the push server processes the notification request. (Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS by including the functionality of Moore's CG (HNG) as stated above, and enhancing Wengrovitz's SIP proxy server by Fox's proxy server's authentication, authorization and translation capabilities such that it can direct the messages to the appliances for which it is intended. Thus, the push server (proxy server) authenticates, authorizes and translates the requests by verifying the certificate. The push server also determines if the certificate was issued from an acceptable certificate authority by examining an acceptable certificate authority list. Finally, the push server checks the content of the notification to be sure it does not interfere with other information service providers. After performing the security checks, the push server processes the notification request.

Referring to claims 11 and 12,

The reference Wengrovitz teaches in FIG. 1A which is a functional block diagram for establishing a SIP call via a proxy SIP server 10. The proxy server 10 receives an invitation from a calling device, referred to as a user agent client (UAC) 15, in the form of an INVITE request. The INVITE request includes the SIP URL of a user agent server (UAS) 20 that contacts the callee when a SIP request is received, and returns a response on behalf of the callee. (page 1, para. [0006]). The reference fails to teach the UAS processor as being connected to the appliance. The reference Moore teaches the home networking gateway (HNG or CG of Fig.1, element 10) providing an interface between an HFC network and an in-home network. Full voice and data connection between the HFC network and each device in the in-home network is provided through the interface. A translator included in the home networking gateway is utilized to provide a mapping between the communication protocols used in the in-home network and the protocols used in the HFC network, eliminating the need for the in-home network to be dependent upon the HFC-specific protocols. (Abstract). Thereby, the reference teaches that the HFC-specific protocols are immaterial to CG (HNG) and can be replaced to handle SIP. The reference also teaches a home networking gateway (HNG) is used as an interface between an HFC network and the home devices and includes the capability of "discovering" the various devices attached to the in-home network. (appliance status information).(page 1, para.[0010]). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS by including the functionality of Moore's CG

(HNG) such that the that the UAS with combined functionality will provide compatibility between the SIP and a variety of in-home networking protocols since the CG (HNG) has a translator function providing compatibility as taught by Moore. Although, the reference Wengrovitz teaches a presence of SIP proxy server facilitating communication between UAC and UAS as stated above, both of these references explicitly fail to teach the proxy server having mapping capability to direct at least some of the messages through the appropriate UAS processor to the appliance to which they are addressed. The reference Fox teaches Proxy server (push server) device 114, also referred to as proxy server or gateway server, may be a workstation or a personal computer and performs mapping or translation functions. For example, the proxy server may map from one network protocol to another network protocol.(Fig.2, element 114, col.3, lines 65-67 and col. 4, lines 1-5, col.6, lines 23-25). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS by including the functionality of Moore's CG (HNG) such that the UAS with combined functionality will provide compatibility between the SIP and a variety of in-home networking protocols since the CG (HNG) has a translator function providing compatibility as taught by Moore, and enhancing Wengrovitz's SIP proxy server by Fox's proxy server's mapping capabilities such that it can direct at least some of the messages through the appropriate UAS processor to the appliance to which they are addressed. Thus, the push server authenticates the request from the information service provider by verifying the certificate. The push server also determines if the certificate was issued from an acceptable certificate

authority by examining an acceptable certificate authority list. Finally, the push server

checks the content of the notification to be sure it does not interfere with other

information service providers. After performing the security checks, the push server

processes the notification request.   Thus, clearly indicated by the references stated

above with their applied motivations, a SIP system session initiation protocol (SIP)

system for communications between a client and at least one networked appliance (to

be replaced by callee of Wengrovitz), comprising:a user agent server (UAS) processor

(Moore's HNG) connected to said appliance so as to relay commands to said appliance

and receive status information from said appliance; a user agent client (UAC) processor

having the capacity to send SIP command messages intended for said appliance to said

UAS processor (Moore's HNG) over a communications network and to receive over the

communications network status information messages about said appliance from said

UAS processor, said UAS processor translating received SIP commands into

commands recognized by the appliance and translating information provided by said

appliance into SIP status messages for transmission over the communications network

to said UAC processor; and a network appliance system proxy server (Proxy) (Fox's

proxy) located between the UAC and the UAS for receiving and conveying information

between them; and wherein the UAS processor does use address mapping capability

for handling at least some of the messages to and from the appliances; and wherein

Proxy has address mapping capability to direct said at least some messages through

the appropriate UAS processor to the appliance to which they are addressed, is

designed once the proxy server can map from one network protocol to another network

protocol and HNG which has a translator included in the home networking gateway is utilized to provide a mapping between the communication protocols used in the in-home network and the protocols used in the HFC network, eliminating the need for the in-home network to be dependent upon the HFC-specific protocols.

Referring to claims 13 and 14,

The reference Wengrovitz teaches in FIG. 1A which is a functional block diagram for establishing a SIP call via a proxy SIP server 10. The proxy server 10 receives an invitation from a calling device, referred to as a user agent client (UAC) 15, in the form of an INVITE request. The INVITE request includes the SIP URL of a user agent server (UAS) 20 that contacts the callee when a SIP request is received, and returns a response on behalf of the callee. (page 1, para. [0006]). The reference fails to teach the UAS processor as being connected to the appliance and to teach authentication, authorization and translation capabilities of UAS. The reference Moore teaches the home networking gateway (HNG or CG of Fig.1, element 10) providing an interface between an HFC network and an in-home network. Full voice and data connection between the HFC network and each device in the in-home network is provided through the interface. A translator included in the home networking gateway is utilized to provide a mapping between the communication protocols used in the in-home network and the protocols used in the HFC network, eliminating the need for the in-home network to be dependent upon the HFC-specific protocols. (Abstract). Thereby, the reference teaches that the HFC-specific protocols are immaterial to CG (HNG) and can be replaced to handle SIP. The reference also teaches a home networking gateway

(HNG) is used as an interface between an HFC network and the home devices and includes the capability of "discovering" the various devices attached to the in-home network. (appliance status information).(page 1, para.[0010]). The reference Moore teaches in performing service management, HNG 30 controls access to MSO-based services. HNG 30 can obtain from NMS/EMS authorization and authentication information to subscribers to access services or, alternatively, by consulting its service level agreement (SLA) database 64 to see if the service is listed for the home. In this embodiment, SLA database 64 contains the services authorized in the home services by HNG 30 as well as the class of service (e.g., premium, standard or basic) with which the subscriber has signed. (page 3, [0037]). The reference Moore also teaches a translator included in the home networking gateway is utilized to provide a mapping between the communication protocols used in the in-home network and the protocols used in the HFC network, eliminating the need for the in-home network to be dependent upon the HFC-specific protocols. (Abstract). Thereby the reference teaches that the HNG of Moore (UAS processor) has the capability to use, if required, and not to use, if not required, message authentication , message authorization, and message translation functions. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS processor by including the functionality of Moore's CG (HNG) such that the UAS with combined functionality will provide compatibility between the SIP and a variety of in-home networking protocols since the CG (HNG) has message authentication, message authorization, and message translation functions as taught by Moore wherein the UAS

processor does or does not use message authentication capabilities, message authorization capabilities and message translation capabilities. Thus, providing these capabilities to HNG, SLA can be checked to determine the QoS guaranteed for each service as taught by Moore. Although, the reference Wengrovitz teaches a presence of SIP proxy server facilitating communication between UAC and UAS as stated above, both of these references explicitly fail to teach the proxy server having authorization and authentication capabilities for the appliances connected by the UAS servers to the proxy server. The reference Fox teaches proxy server (push server) device 114, also referred to as proxy server or gateway server, may be a workstation or a personal computer and performs mapping or translation functions. For example, the proxy server may map from one network protocol to another network protocol.(Fig.2, element 114, col.3, lines 65-67 and col. 4, lines 1-5, col.6, lines 23-25). The push server authenticates the request from the information service provider by verifying the certificate. The push server also determines if the certificate was issued from an acceptable certificate authority by examining an acceptable certificate authority list. Finally, the push server checks the content of the notification to be sure it does not interfere with other information service providers. After performing the security checks, the push server processes the notification request. (Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS by including the functionality of Moore's CG (HNG) as stated above, and enhancing Wengrovitz's SIP proxy server by Fox's proxy server's authentication, authorization and translation capabilities such that it can direct the

messages to the appliances for which the clients are authorized , authenticated and in the form that appliance can interpret. Thus, the push server (proxy server) authenticates, authorizes and translates the requests by verifying the certificate. The push server also determines if the certificate was issued from an acceptable certificate authority by examining an acceptable certificate authority list. Finally, the push server checks the content of the notification to be sure it does not interfere with other information service providers. After performing the security checks, the push server processes the notification request.

Referring to claims 15 and 16,

The reference Wengrovitz teaches in FIG. 1A which is a functional block diagram for establishing a SIP call via a proxy SIP server 10. The proxy server 10 receives an invitation from a calling device, referred to as a user agent client (UAC) 15, in the form of an INVITE request. The INVITE request includes the SIP URL of a user agent server (UAS) 20 that contacts the callee when a SIP request is received, and returns a response on behalf of the callee. (page 1, para. [0006]). The reference fails to teach the UAS processor as being connected to the appliance and to teach authentication, authorization and translation capabilities of UAS. The reference Moore teaches the home networking gateway (HNG or CG of Fig.1, element 10) providing an interface between an HFC network and an in-home network. Full voice and data connection between the HFC network and each device in the in-home network is provided through the interface. A translator included in the home networking gateway is utilized to provide a mapping between the communication protocols used in the in-home network

and the protocols used in the HFC network, eliminating the need for the in-home network to be dependent upon the HFC-specific protocols. (Abstract). Thereby, the reference teaches that the HFC-specific protocols are immaterial to CG (HNG) and can be replaced to handle SIP. The reference also teaches a home networking gateway (HNG) is used as an interface between an HFC network and the home devices and includes the capability of "discovering" the various devices attached to the in-home network. (appliance status information).(page 1, para.[0010]). The reference Moore teaches in performing service management, HNG 30 controls access to MSO-based services. HNG 30 can obtain from NMS/EMS authorization and authentication information to subscribers to access services or, alternatively, by consulting its service level agreement (SLA) database 64 to see if the service is listed for the home. In this embodiment, SLA database 64 contains the services authorized in the home services by HNG 30 as well as the class of service (e.g., premium, standard or basic) with which the subscriber has signed. (page 3, [0037]). The reference Moore also teaches a translator included in the home networking gateway is utilized to provide a mapping between the communication protocols used in the in-home network and the protocols used in the HFC network, eliminating the need for the in-home network to be dependent upon the HFC-specific protocols. (Abstract). Thereby the reference teaches that the HNG of Moore (UAS processor) has the capability to use, if required, and not to use, if not required, message authentication , message authorization, and message translation functions. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS processor by

including the functionality of Moore's CG (HNG) such that the UAS with combined functionality will provide compatibility between the SIP and a variety of in-home networking protocols since the CG (HNG) has message authentication, message authorization, and message translation functions as taught by Moore wherein the UAS processor does or does not use message authentication capabilities, message authorization capabilities and message translation capabilities. Thus, providing these capabilities to HNG, SLA can be checked to determine the QoS guaranteed for each service as taught by Moore. Although, the reference Wengrovitz teaches a presence of SIP proxy server facilitating communication between UAC and UAS as stated above, both of these references explicitly fail to teach the proxy server having authorization and authentication capabilities for the appliances connected by the UAS servers to the proxy server. The reference Fox teaches proxy server (push server) device 114, also referred to as proxy server or gateway server, may be a workstation or a personal computer and performs mapping or translation functions. For example, the proxy server may map from one network protocol to another network protocol.(Fig.2, element 114, col.3, lines 65-67 and col. 4, lines 1-5, col.6, lines 23-25). The push server authenticates the request from the information service provider by verifying the certificate. The push server also determines if the certificate was issued from an acceptable certificate authority by examining an acceptable certificate authority list. Finally, the push server checks the content of the notification to be sure it does not interfere with other information service providers. After performing the security checks, the push server processes the notification request. (Abstract). The reference shows the proxy server

Fig.2, element 114, which includes also a push server performing the same functions as the proxy server. (First and second proxy servers)(col. 6, lines 23-25). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Wengrovitz's UAS by including the functionality of Moore's CG (HNG) as stated above, and enhancing Wengrovitz's SIP proxy server by Fox's proxy server's authentication, authorization and translation capabilities such that it can direct the messages to the appliances for which the clients are authorized , authenticated and in the form that appliance can interpret. Thus, the push server (proxy server) authenticates, authorizes and translates the requests by verifying the certificate. The push server also determines if the certificate was issued from an acceptable certificate authority by examining an acceptable certificate authority list. Finally, the push server checks the content of the notification to be sure it does not interfere with other information service providers. After performing the security checks, the push server processes the notification request.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (703) 305-2655. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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